Remarks at the Massachusetts Institute of Technology in Cambridge, Massachusetts

October 23, 2009

Thank you very much. Please, have a seat. Thank you. Thank you, MIT. I am hugely honored to be here. It's always been a dream of mine to visit the most prestigious school in Cambridge, Massachusetts. Oh, hold on a second—certainly the most prestigious school in this part of Cambridge, Massachusetts. [*Laughter*] And I'll probably be here for a while. I understand a bunch of engineering students put my motorcade on top of Building 10. [*Laughter*] Here—this tells you something about MIT: Everybody hands out periodic tables. [*Laughter*] What's up with that? [*Laughter*]

I want to thank all of you today for the warm welcome and for the work that all of you are doing to generate and test new ideas that hold so much promise for our economy and for our lives. And in particular, I want to thank two outstanding MIT professors, Eric Lander, a person you just heard from, Ernie Moniz, for their service on my Council of Advisers on Science and Technology. And they have been hugely helpful to us already on looking at, for example, how the Federal Government can most effectively respond to the threat of the H1N1 virus. And so I'm very grateful to them.

We've got some other special guests here I just want to acknowledge very briefly. First of all, my great friend and a champion of science and technology here in the great Commonwealth of Massachusetts, my friend Deval Patrick is here. Our Lieutenant Governor, Tim Murray, is here. Attorney General Martha Coakley is here. Auditor of the Commonwealth Joe DeNucci is here. The mayor of the great city of Cambridge, Denise Simmons, is in the house. The mayor of Boston, Tom Menino, is not here, but he met me at the airport, and he is doing great. [*Laughter*] He sends best wishes.

Somebody who really has been an all-star in Capitol Hill over the last 20 years, but certainly over the last year, on a whole range of issues, everything from Afghanistan to clean energy, a great friend, John Kerry. Please give John Kerry a round of applause. And a wonderful Member of Congress—I believe this is your district, is that correct, Mike?—Mike Capuano, please give Mike a big round of applause.

Now, Dr. Moniz is also the director of MIT's Energy Initiative, called MITEI. And he and President Hockfield just showed me some of the extraordinary energy research being conducted at this institute: Windows that generate electricity by directing light to solar cells; lightweight, high-power batteries that aren't built, but are grown—that was neat stuff—[*laughter*—engineering viruses to create batteries; more efficient lighting systems that rely on nanotechnology; innovative engineering that will make it possible for offshore wind powerplants to deliver electricity even when the air is still.

And it's a reminder that all of you are heirs to a legacy of innovation—not just here but across America—that has improved our health and our well-being and helped us achieve unparalleled prosperity. I was telling John and Deval on the ride over here, you just get excited being here and seeing these extraordinary young people and the extraordinary leadership of Professor Hockfield, because it taps into something essential about America. It's the legacy of daring men and women who put their talents and their efforts into the pursuit of discovery, and

it's the legacy of a nation that supported those intrepid few willing to take risks on an idea that might fail, but might also change the world.

Even in the darkest of times that this Nation has seen, it has always sought a brighter horizon. Think about it. In the middle of the Civil War, President Lincoln designated a system of land-grant colleges, including MIT, which helped open the doors of higher education to millions of people. A year—a full year before the end of World War II, President Roosevelt signed the GI bill, which helped unleash a wave of strong and broadly shared economic growth. And after the Soviet launch of Sputnik, the first artificial satellite to orbit the Earth, the United States went about winning the space race by investing in science and technology, leading not only to small steps on the Moon but also to tremendous economic benefits here on Earth.

So the truth is, we have always been about innovation, we have always been about discovery. That's in our DNA. The truth is, we also face more complex challenges than generations past: A medical system that holds the promise of unlocking new cures is attached to a health care system that has the potential to bankrupt families and businesses and our Government; a global marketplace that links the trader on Wall Street to the homeowner on Main Street to the factory worker in China, an economy in which we all share opportunity is also an economy in which we all share crisis. We face threats to our security that seek—there are threats to our security that are based on those who would seek to exploit the very interconnectedness and openness that's so essential to our prosperity. The system of energy that powers our economy also undermines our security and endangers our planet.

Now, while the challenges today are different, we have to draw on the same spirit of innovation that's always been central to our success. And that's especially true when it comes to energy. There may be plenty of room for debate as to how we transition from fossil fuels to renewable fuels. We all understand there's no silver bullet to do it. There's going to be a lot of debate about how we move from an economy that's importing oil to one that's exporting clean energy technology, how we harness the innovative potential on display here at MIT to create millions of new jobs, and how we will lead the world to prevent the worst consequences of climate change. There are going to be all sorts of debates, both in the laboratory and on Capitol Hill, but there's no question that we must do all these things.

Countries on every corner of this Earth now recognize that energy supplies are growing scarcer, energy demands are growing larger, and rising energy use imperils the planet we will leave to future generations. And that's why the world is now engaged in a peaceful competition to determine the technologies that will power the 21st century. From China to India, from Japan to Germany, nations everywhere are racing to develop new ways to produce and use energy. The nation that wins this competition will be the nation that leads the global economy. I am convinced of that. And I want America to be that nation. It's that simple.

Now, that's why the Recovery Act that we passed back in January makes the largest investment in clean energy in history, not just to help end this recession, but to lay a new foundation for lasting prosperity. The Recovery Act includes $80 billion to put tens of thousands of Americans to work developing new battery technologies for hybrid vehicles, modernizing the electric grid, making our homes and businesses more energy efficient, doubling our capacity to generate renewable electricity. These are creating private sector jobs weatherizing homes, manufacturing cars and trucks, upgrading to smart electric meters, installing solar panels, assembling wind turbines, building new facilities and factories and laboratories all across America, and, by the way, helping to finance extraordinary research.

In fact, in just a few weeks, right here in Boston, workers will break ground on a new Wind Technology Testing Center, a project made possible through a $25 million Recovery Act investment as well as through the support of Massachusetts and its partners. And I want everybody to understand, Governor Patrick's leadership and vision made this happen. He was bragging about Massachusetts on the way over here. I told him, "You don't have to be a booster, I already love the State." But he helped make this happen.

Hundreds of people will be put to work building this new testing facility, but the benefits will extend far beyond these jobs. For the first time, researchers in the United States will be able to test the world's newest and largest wind turbine blades, blades roughly the length of a football field, and that in turn will make it possible for American businesses to develop more efficient and effective turbines and to lead a market estimated at more than $2 trillion over the next two decades.

This grant follows other Recovery Act investments right here in Massachusetts that will help create clean energy jobs in this Commonwealth and across the country. And this only builds on the work of your Governor, who has endeavored to make Massachusetts a clean energy leader, from increasing the supply of renewable electricity to quadrupling solar capacity to tripling the Commonwealth's investment in energy efficiency, all of which helps to draw new jobs and new industries. Now, even—[*applause*]—that's worth applause.

Now, even as we're investing in technologies that exist today, we're also investing in the science that will produce the technologies of tomorrow. The Recovery Act provides the largest single boost in scientific research in history. Let me repeat that. The Recovery Act, the stimulus bill, represents the largest single boost in scientific research in history. An increase—[*applause*]—that's an increase in funding that's already making a difference right here on this campus. And my budget also makes the research and experimentation tax credit permanent, a tax credit that spurs innovation and jobs, adding $2 to the economy for every dollar that it costs.

And all of this must culminate in the passage of comprehensive legislation that will finally make renewable energy the profitable kind of energy in America. John Kerry is working on this legislation right now, and he's doing a terrific job reaching out across the other side of the aisle, because this should not be a partisan issue. Everybody in America should have a stake in legislation that can transform our energy system into one that's far more efficient, far cleaner, and provides energy independence for America, making the best use of resources we have in abundance, everything from figuring out how to use the fossil fuels that inevitably we are going to be using for several decades—things like coal and oil and natural gas—figuring out how we use those as cleanly and efficiently as possible, creating safe nuclear power, sustainable—sustainably grown biofuels, and then the energy that we can harness from the wind and the waves and the Sun. It is a transformation that will be made as swiftly and as carefully as possible to ensure that we are doing what it takes to grow this economy in the short, medium, and long term. And I do believe that a consensus is growing to achieve exactly that.

The Pentagon has declared our dependence on fossil fuels a security threat. Veterans from Iraq and Afghanistan are traveling the country as part of Operation Free, campaigning to end our dependence on oil. We have a few of these folks here today, right there. The young people of this country that I've met all across America, they understand that this is the challenge of their generations.

Leaders in the business community are standing with leaders in the environmental community to protect the economy and the planet we leave for our children. The House of Representatives has already passed historic legislation, due in large part to the efforts of

Massachusetts's own Ed Markey. [*Applause*] He deserves a big round of applause. We're now seeing prominent Republicans like Senator Lindsey Graham joining forces with long-time leaders like John Kerry on this issue to swiftly pass a bill through the Senate as well. In fact, the Energy Committee, thanks to the work of its chair, Senator Jeff Bingaman, has already passed key provisions of comprehensive legislation.

So we are seeing a convergence. The naysayers, the folks who would pretend that this is not an issue, they are being marginalized. But I think it's important to understand that the closer we get, the harder the opposition will fight and the more we'll hear from those whose interest or ideology run counter to the much-needed action that we're engaged in. There are those who will suggest that moving toward clean energy will destroy our economy, when it's the system we currently have that endangers our prosperity and prevents us from creating millions of new jobs. There are going to be those who cynically claim—make cynical claims that contradict the overwhelming scientific evidence when it comes to climate change, claims whose only purpose is to defeat or delay the change that we know is necessary.

So we're going to have to work on those folks. But understand, there's also another myth that we have to dispel, and this one is far more dangerous because we're all somewhat complicit in it. It's far more dangerous than any attack made by those who wish to stand in the way of progress, and that's the idea that there is nothing or little that we can do. It's pessimism. It's the pessimistic notion that our politics are too broken and our people too unwilling to make hard choices for us to actually deal with this energy issue that we're facing. And implicit in this argument is the sense that somehow we've lost something important: that fighting American spirit; that willingness to tackle hard challenges; that determination to see those challenges to the end; that we can solve problems; that we can act collectively—that somehow that is something of the past.

I reject that argument. I reject it because of what I've seen here at MIT, because of what I have seen across America, because of what we know we are capable of achieving when called upon to achieve it. This is the nation that harnessed electricity and the energy contained in the atom, that developed the steamboat and the modern solar cell. This is the nation that pushed westward and looked skyward. We have always sought out new frontiers, and this generation is no different.

Today's frontiers can't be found on a map. They're being explored in our classrooms and our laboratories, in our startups and our factories. And today's pioneers are not traveling to some far flung place. These pioneers are all around us—the entrepreneurs and the inventors, the researchers, the engineers—helping to lead us into the future, just as they have in the past. This is the nation that has led the world for two centuries in the pursuit of discovery. This is the nation that will lead the clean energy economy of tomorrow, so long as all of us remember what we have achieved in the past and we use that to inspire us to achieve even more in the future.

I am confident that's what's happening right here at this extraordinary institution. And if you will join us in what is sure to be a difficult fight in the months and years ahead, I am confident that all of America is going to be pulling in one direction to make sure that we are the energy leader that we need to be.

Thank you very much, everybody. God bless you. God bless the United States of America.

NOTE: The President spoke at 12:44 p.m. In his remarks, he referred to Ernest J. Moniz, director, Energy Initiative, Eric S. Lander, professor of biology, and Susan Hockfield, president, Massachusetts Institute of Technology; and Gov. Deval L. Patrick of Massachusetts.

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